



MISSOURI. Conservationist

VOLUME 77, ISSUE 3, MARCH 2016 • SERVING NATURE & YOU

Jana Mula

[NOTE TO OUR READERS]

Being a Woman in Conservation

I am passionate about conservation for the same reasons you are — a lifetime of outdoor experiences shared with others. Thinking about conservation and why it matters started when I was very young.

In the 1970s, I listened to my dad, grandpas, and uncles talk about upcoming deer seasons. They expressed satisfaction that conservation efforts had improved Missouri's deer herd, and that made an impression on me. Conservation principles and people's support for them made it possible to see and harvest deer routinely on our families' Osage County farms. Even though I was too young to hunt, I remember being glad about conservation because my dad would always stop along county roads and farm lanes to give my brother and me a chance to see deer standing in fields. The first time my brother spotted a deer before my dad did, Dad called him "eagle eye." My brother was so proud, and I was proud for him. Decades of conservation made that 1970s moment possible. Our state's continued commitment to conservation makes moments like that possible for all of us today.

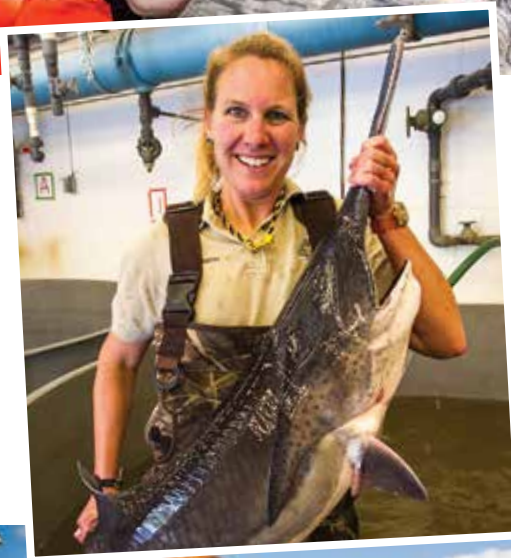
Thinking conceptually about how conservation empowers women came later in my life, but an experience from my early childhood — and a lifetime of my mother's support — helped set a course for me being a "woman in conservation."

One morning my parents lifted my brother and me from our beds earlier than usual. They left us with my grandma so my mom could hunt alongside my dad on a very cold deer season Saturday. When you are a kid, you mostly think about your dad being tough. Seeing my mom dressed for the field, ready for harsh conditions, and equipped the same as any hunting man left me thinking my mom must be pretty tough, too. In addition to trying her hand at deer hunting, Mom made great efforts to orchestrate summer swimming trips to local creeks, and she coached us kids through tall grass, briers, ticks, and snake encounters to fill ice-cream buckets with blackberries. She also worked with my dad to find opportunities for our busy family of six to go fishing.

While my mom helped lay the foundation for my appreciation of outdoor experiences, many other women and men have helped me find the courage to embrace new outdoor adventures and career challenges. Each adventure started with someone saying, "Let's go! I'll help you."

The Missouri Department of Conservation is here to help you find your next outdoor adventure. March is a great time to start planning, and we have programs and conservation areas to help you and your family discover nature every day. For more information, visit our website at mdc.mo.gov, or call your regional office. You'll find the number listed on Page 3.

Jennifer Battson Warren, deputy director



DEER HUNTING: NOPPADOL PAOTHONG; FISHERY BIOLOGIST: NOPPADOL PAOTHONG; POND FISHING: DAVID STONNER

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WHAT IS IT?

Our photographers have been busy exploring the intricacies of outdoor Missouri. See if you can guess this month's natural wonder. The answer is revealed on Page 8.



NATURE AT NIGHT

The December 2015 issue was superb. In particular, I very much enjoyed Dan Zarlenga's *Discovering Nature at Night* [Page 22].

The scenes captured in the article and the tips it provided were terrific. That issue is going to stay around my home for a while.

Don Hiscock, St. Louis

I really enjoyed your December issue. The article by Dan Zarlenga features a natural resource that is endangered — dark skies. Fellow astronomers are very fortunate for the state's conservation areas — far from city lights. Thank you for featuring some of the beauty of this half of the day.

Jim Twellman, Lake St. Louis

Thanks for the *Discovering Nature at Night* article in your December issue. The photos that graced the cover and accompanied the article

were beautiful. It was interesting to read not just how the author composed his photos, but his advice for beginner stargazers and astro-photographers, too.

Christopher Thorne, Arnold

PLACES TO GO

Thank you for the wonderful article in the January Places To Go section by Justin Gailey [*White River Trace Conservation Area*; Page 32].

He gave interesting facts about the Indian Removal Act of 1830. I had only a vague idea about this sad chapter in American history. I thank Mr. Gailey and you for printing this. Please keep up the good work.

Jackie Luebbert, Meta

MO HUNTING APP

I enjoyed reading about the MO Hunting App in the January issue [News & Events; Page 7]. The new phone app saved me when I realized I

forgot to buy my deer tag at 10 p.m. the night before opening day! I harvested my first deer during my third season out — a nice 11-point atypical in Iron County.

Brian Mueller, Ballwin

MILKWEED

I loved your article in the January magazine about raising milkweed plants [*Homegrown Milkweeds*; Page 24]. This was an eye opener for me.

Denise Linder, St. Louis

The article about growing milkweeds and the photos that accompanied it were the best I've ever read on how to grow these crucial monarch attractors. It's definitely a keeper.

The house we built in Saline County in 1991 was in a monarch migration route. There was a fairly good supply of common milkweed along the roadsides and on our property to attract them to leave their eggs and to feed their larvae.

Now, 25 years later, seeing a monarch here is a rare thing. Although I've been growing *Asclepias* for at least 20 years, a poor attempt to compensate for the loss of common milkweed, there has been no sign of eggs on the plants for the last two years. I have not seen a single monarch stop in the butterfly garden, and other varieties are not nearly as numerous.

It's alarming that so few people seem to notice or understand the interdependence of humans and nature. We've forgotten that our lives depend upon other species, each of which plays some part in maintaining life on this planet.

Jo Woodward, Marshall

CARDINALS FAN

I have received this publication for many years, and the January issue with the photo by Danny Brown is extraordinary [Plants and Animals; *Northern Cardinal*; Page 30]. I am so grateful that we have an amazing cause in our state — conservation. Thank you for all of your efforts and keeping your readership educated.

Joseph Dolan, St. Louis



Reader Photo

DUTCHMAN'S BREECHES

Sally Burton of Camdenton took this photo of Dutchman's breeches while hiking on a trail by Lake of the Ozarks. Dutchman's breeches are one of the earlier spring wildflowers to appear, blooming from March to May. Burton said she frequently enjoys hiking around the lake and taking photos in all seasons of the year. "My favorite subject is my son, Jackson, who is a 7-year-old redhead in constant action," said Burton. "I also love taking photos of anything outdoors, but especially flowers. I've attempted to capture many a sunset as well, but the pictures just never do the real thing justice."



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SUBSCRIPTIONS

Phone: 573-522-4115, ext. 3856 or 3249

Address: Circulation, PO Box 180, Jefferson City 65102-0180

Email: Subscriptions@mdc.mo.gov

Conservationist online services: Subscribe to the magazine, update your mailing address, or sign up to receive an email when the latest issue is available online at on.mo.gov/1E6osBA

Cost of subscriptions: Free to Missouri households

Out of State \$7 per year

Out of Country \$10 per year

Please allow 6-8 weeks for delivery of your first issue.

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The Missouri Conservationist (ISSN 0026-6515) is the official monthly publication of the Missouri Department of Conservation, 2901 West Truman Boulevard, Jefferson City, MO (Mailing address: PO Box 180, Jefferson City, MO 65102.) Subscription free to adult Missouri residents; out of state \$7 per year; out of country \$10 per year. Notification of address change must include both old and new address (send mailing label with the subscriber number on it) with 60-day notice. Preferred periodical postage paid at Jefferson City, Missouri, and at additional entry offices. Postmaster: Send correspondence to Circulation, PO Box 180, Jefferson City, MO 65102-0180. Phone: 573-522-4115, ext. 3856 or 3249. Copyright © 2016 by the Conservation Commission of the State of Missouri.

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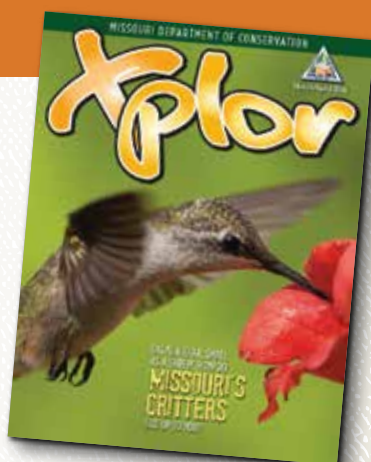
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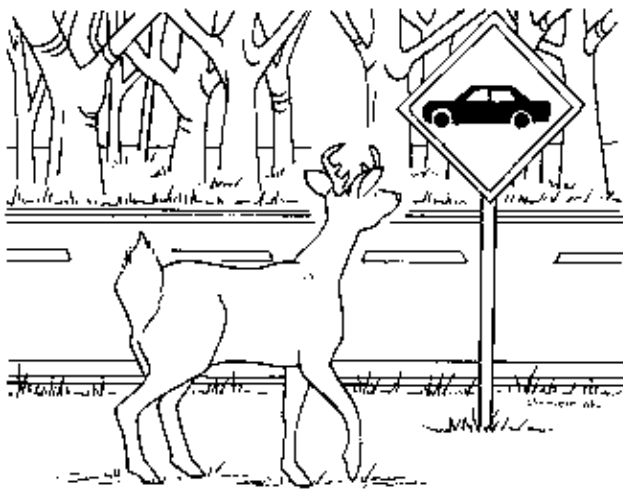
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Agent Notes

Being a New Female Conservation Agent in Missouri



I REMEMBER THE first time I realized I wanted to be a conservation agent. I was attending a hunter education course in Mississippi, and I recall watching the game wardens teach us firearms handling and hunting skills. It was impressive seeing someone with a badge on their chest taking time out of their busy schedules to teach us, and they enjoyed every minute of it.

I worked my way through college to earn a degree that was specifically designed for becoming a conservation agent. The biggest struggle I experienced in college was continually hearing that women could not do this job. Despite the negativity, I spent many months in a long interview process to be a conservation agent with the Missouri Department of Conservation. Being an applicant from another state was difficult, but I was blessed and privileged to earn a spot as one of 10 people in the 2015 Conservation Agent Training Academy. I worried about the stigma of being a female conservation agent, but the academy and people I met along the way eased my concerns.

Now that I am a conservation agent, I am proud to say I have accomplished what some said could not be done. I am proud to be part of a select few female conservation agents, and I hope I can be a role model for others when choosing their career path.

Samantha Rhoades is the conservation agent for Osage County. If you would like to contact the agent for your county, phone your regional conservation office listed on Page 3.

HUNTING & FISHING CALENDAR

FISHING	OPEN	CLOSE
Black Bass from most streams south of the Missouri River	05/28/16	02/28/17
Paddlefish	03/15/16	04/30/16
Trout Parks		
Catch-and-Keep	03/01/16	10/31/16
Catch-and-Release	11/11/16	02/13/17
HUNTING	OPEN	CLOSE
Coyote (restrictions apply during April, spring turkey season, and firearms deer season)	All year	None
Crow	11/01/15	03/03/16
Deer		
Archery	09/15/16 11/23/16	11/11/16 01/15/17
Firearms		
Early Youth Portion	10/29/16	10/30/16
November Portion	11/12/16	11/22/16
Late Youth Portion	11/25/16	11/27/16
Antlerless Portion (open areas only)	12/02/16	12/04/16
Alternative Methods Portion	12/24/16	01/03/17
Turkey		
Archery	09/15/16 11/23/16	11/11/16 01/15/17
Firearms		
Youth	04/09/16	04/10/16
Spring	04/18/16	05/08/16
Fall	10/01/16	10/31/16
Waterfowl	see the <i>Waterfowl Hunting Digest</i> or on.mo.gov/201Jtur	
TRAPPING	OPEN	CLOSE
Beaver and Nutria	11/15/15	03/31/16

For complete information about seasons, limits, methods, and restrictions, consult the *Wildlife Code* and the current summaries of *Missouri Hunting and Trapping Regulations* and *Missouri Fishing Regulations*, *The Spring Turkey Hunting Regulations and Information*, the *Fall Deer and Turkey Hunting Regulations and Information*, the *Waterfowl Hunting Digest*, and the *Migratory Bird Hunting Digest*. For more information, visit on.mo.gov/1QqA4qP or permit vendors.

Operation Game Thief

Help put game thieves out of business. If you see a possible violation in progress, call your county conservation agent immediately or dial the toll-free number below:

1-800-392-1111

All information is kept in strict confidence. Desirable information includes names of violators, vehicle description and license number, as well as the violation location.

Ask MDC

Address: PO Box 180, Jefferson City, MO 65102-0180
Phone: 573-522-4115, ext. 3848 Email: AskMDC@mdc.mo.gov



Eastern towhee

What is this bird?

It's an adult male eastern towhee (*Pipilo erythrophthalmus*).

Sharp-eyed enthusiasts may notice this bird's distinctive double kick as it vigorously rakes through leaf litter in search of insects, seeds, and berries. You are most likely to see this species at your feeders on snowy days when icy conditions make scratching for their dinner less tempting.

This "old field" bird prefers forest edges, woodland glades, and streamside thickets filled with brushy tangles and cedar groves. They spend much of their time concealed in thick underbrush, so chances are you'll hear it before you see it.

They make a musical trill that sounds very much like "Drink your tea" (or "jink denk te-e-e-e-e"). To hear the eastern towhee, visit allaboutbirds.org/guide/Eastern_Towhee/id.

Eastern towhees are short-distance migrants, taking advantage of good summer food supplies in the northern United States and parts of southern Canada. But they shift south again in winter to escape the cold. They are present statewide, but far fewer birds reside in northern Missouri in winter.

They are closely related to the spotted towhee (*P. maculatus*). The two species interbreed in a few places along rivers in the Great Plains where suitable habitat is present and their ranges overlap.

Just prior to Christmas, my neighbors saw a pair of spotted fawns that looked 2 or 3 weeks old. And I saw one in early January that appeared as if it just lost its spots. Isn't this rare?

Yes, it's rare to see such young fawns in the middle of winter, but not outside the realm of possibility. Fawns typically lose their spots three to four months after birth. Thus, a fawn with spots in late December was probably born in September. Given the 200-day gestation period for white-tailed deer, the fawn was probably conceived sometime in late February or early March. It would be rare for a deer to breed during this time in Missouri, but more common in states further south.

Does that are not bred during their first estrus can continue to cycle into estrus up to six or seven times at 21- to 30-day intervals before entering a nonbreeding phase. Since most does undergo their first estrus in November, deer are actually capable of breeding into March, so it is possible for a doe to be impregnated late in the season.

My 22-year-old weeping willow is dying. I had to cut a big limb off the bottom. As I pulled out the saw, water streamed out as if a hose was attached. It lasted a few minutes and made quite a stench. Is this common? What caused it?

Some tree species will ooze sap after cutting or wounding, especially on warm days in late winter. This is how we get maple syrup, for example. However, such trees will usually ooze slowly, and won't have a strong odor.

It's possible the tree has a condition known as bacterial wetwood or slime flux — essentially a fermentation of sap causing strong gases to build up under pressure, forcing out a frothy, liquid substance.

For more information, visit msucare.com/pubs/infosheets/is1664.



Brown creeper

Meet a Migrator: The Brown Creeper

A secretive little bird known as the brown creeper (*Certhia americana*) abounds in Missouri's woodlands and forests, especially during peak migration in April and October.

The small, aptly-named bird forages for insects by creeping up large trees in a spiral pattern,

then suddenly falls in an awkward-looking flight to the base of a nearby tree and starts up again. The creeper's brown-and-white back and wings make it almost invisible on tree trunks because it looks like a piece of shifting bark, blending into the browns and grays of the tree.

When thinking of migratory birds, it's easy to imagine long-distance flights to tropical Central or South America and back.

But not for this little guy!

Creepers spend their summers in the coniferous and deciduous forests of eastern, northern, and western North America. In winter, they only shift their range south by a few states and also move into south-central and Midwest states.

Each spring, brown creepers migrate to places with large patches of old forest that contain standing dead or dying trees with shaggy bark for nesting. They build a hammock-like nest under the loose bark. In Missouri, some mature forest tracts of shortleaf pine, bald cypress, and silver maples have suitable shaggy-bark nesting sites that will occasionally host a nesting creeper.

To find these little birds, visit a conservation area with woodlands or forests. To locate a conservation area near you, check out the Department's online atlas at mdc.mo.gov/atlas.

Remember, brown creepers like large trees with lots of hidden places for snacking opportunities. In the right habitat, these birds are common. But they can be hard to spot, given their camouflage.

To find them, listen for their high-pitched "tseeee" calls. Try to locate the general direction of the sound, scan the tree trunks looking for movement, and be patient. Creepers are most easily seen when they flutter to the base of a new tree. Learn more at bit.ly/1NyAmrb.

Celebrating Migratory Birds

The year 2016 marks the centennial of the Migratory Bird Treaty, signed by the United States and Great Britain, on behalf of Canada, in 1916.

After 100 years of market hunting and unregulated use of migratory birds for their meat, feathers, and eggs, many bird populations had plummeted by the early 20th century. The federal government took action to stop further losses by signing the Migratory Bird Treaty. It specifically prohibits the hunting, killing, capturing, possession, sale, transportation, and exportation of birds, eggs, feathers, and nests. Hunting seasons were added later to help maintain healthy bird populations. The Migratory Bird Treaty — and three other similar treaties



Brown creeper range map

with Mexico, Russia, and Japan — is the cornerstone of migratory bird conservation across international borders.

The treaty not only protects populations of migratory birds like the brown creeper, but also enhances our lives by ensuring populations of diverse, beautiful birds are sustained for generations to come. The Department manages different natural communities across the state to provide stop-over foraging habitats for these birds along their annual migration routes. The brown creeper is an excellent example of international conservation cooperation since part of its range stretches from Canada down through central Mexico and as far south as northern Nicaragua. For more information on the Migratory Bird Treaty Centennial, visit fws.gov/birds/MBTreaty100/.

Fish Species Found Along Missouri's Border New to the State

Illinois biologists have captured several specimen of the banded killifish (*Fundulus diaphanus*), a species not previously known to be from Missouri.



Banded killifish

This species naturally occurs from North Dakota to Maine — its range barely extends into Canada — and south along the Atlantic coast to North Carolina. Killifish also are found in Michigan, Wisconsin, and Minnesota. Recently, the species became established near the Quad Cities and Keokuk.

In 2014, it was found in Mississippi River Navigation Pool 20 in Missouri. Last year, more were discovered near Canton and West Alton at Brickhouse Slough. The expansion is believed to be natural and may be related to recent Mississippi River floods.

Because banded killifish are established near Keokuk, scientists believe more Missouri occurrences will be documented and new populations could become established.

Biologists do not believe this species will cause ecological or economic harm to the Mississippi River.

Department Proposes Banning Hog Hunting on Conservation Areas

The Missouri Conservation Commission in January voiced initial approval for recommended changes to the *Wildlife Code of Missouri* that would prohibit taking feral hogs on lands owned, leased, or managed by the Missouri Department of Conservation.

The next step in the rulemaking process includes a 30-day public comment period on the proposed regulation changes, which will run from April 2 through May 1. Public comments can be submitted by mail to Missouri Department



CONSERVATION COMMISSION ACTIONS

The January Commission meeting featured presentations and discussions regarding communications, chronic wasting disease, feral hogs, impacts of the December 2015 flood to Department facilities and conservation areas, and fiscal year 2016 mid-year review of major construction projects, information technology projects, and revenue and expenditure trends. A summary of actions taken during the Jan. 21–22 meeting for the benefit and protection of fish, forest, and wildlife, and the citizens who enjoy them includes:

- » **Recognized** Conservation Agents Eric Abbott, Anthony Maupin, and Jade Wright, who were awarded the Missouri Medal of Valor.
- » **Approved** recommendations for changes to the *Wildlife Code of Missouri* that would prohibit the taking of feral livestock (including feral hogs) on lands owned, leased, or managed under cooperative agreement by the Department of Conservation. The formal 30-day public comment period will be April 2 through May 1.
- » **Approved** the advertisement and sale of an estimated 960,255 board feet of timber located on 827 acres of Compartment 9 on the Angeline Conservation Area in Shannon County.
- » **Approved** the donation of approximately 11.17 acres in St. Louis County as an addition to Rockwoods Range.
- » **Approved** the purchase of tracts containing approximately 1,635 acres in Morgan County as an addition to Big Buffalo Creek Conservation Area.
- » **Approved** the purchase of approximately 37 acres in Clinton County as an addition to McGee Family Conservation Area.

The next Conservation Commission meeting is March 10 and 11. For more information, visit on.mo.gov/1li700p or call your regional Conservation office (phone numbers on Page 3).

[NEWS & EVENTS]

(continued from Page 7)

of Conservation, Regulations Committee, PO Box 180, Jefferson City, Missouri 65102-0180. Comments can also be submitted by email to Regulations@mdc.mo.gov or online at on.mo.gov/1QqDR6Z.

Following final Conservation Commission consideration of citizen input and staff recommendations this summer, the anticipated effective date of the regulation changes will be Sept. 30, 2016. Potential penalties for the illegal taking of hogs could include fines and the loss of hunting privileges.

Hog Hunting Causes Headaches

The Conservation Department discourages hunting specifically for feral hogs anywhere in

Missouri. Research from other states shows that hog hunting actually increases feral hog numbers and locations.

According to Wildlife Division Chief Jason Summers, hog hunting on conservation areas ruins efforts by Department staff to trap and kill entire groups of feral hogs, called sounders. Groups can consist of several dozen animals.

"The proposed ban on taking feral hogs on conservation lands is a direct result of hunters disrupting trapping efforts by Department staff," Summers explained. "Staff set large, corral-type traps on areas where there are known feral hogs. They then bait the area with corn for several days or weeks to attract the targeted group of hogs, get

them used to the surroundings, and get them concentrated in the trap before triggering it. This work sometimes takes weeks, with the goal to trap the entire group of hogs.

"After weeks of work to catch the sounder of hogs, an individual hunter finds out about the site and shows up at some point and shoots a hog or two. The rest of the group then scatters and moves to a new location. As a result, weeks of work have been wasted and new areas now have feral hogs that are more difficult to capture."

Instead of shooting hogs to help reduce their numbers, the Department encourages hunters and others to report feral hog sightings to 573-522-4115, ext. 3296, or via an online reporting form at mdc.mo.gov/feralhog. Department staff can then confirm local numbers and locations, and determine how best to capture and kill the entire group of feral hogs.

The Department owns or manages about 1,000 conservation areas around the state with nearly 30 known to have feral hogs, mostly in southern Missouri. One goal of the new regulation is to prevent the illegal, intentional release of feral hogs on other conservation areas.

Releasing Hogs is Illegal

Releasing hogs to nonenclosed areas or to the wild is illegal in Missouri. The Department encourages the public to report these types of illegal activities to local conservation agents or by calling the Operation Game Thief hotline at 800-392-1111.

In the future, the Department will also recommend to the Conservation Commission to revoke the hunting, fishing, and trapping privileges of any individuals found guilty of intentionally releasing feral hogs.

The Department is also working with elected officials, conservation groups, and agricultural organizations to raise awareness of the problem with feral hogs and hog hunting.

Threats to Native Species

Feral hogs are an invasive, nuisance species in Missouri. Their growing populations and numbers of locations are a result of people illegally releasing them to run wild to provide future hunting opportunities.

Feral hogs cause significant damage to wildlife habitats, compete for food with native wildlife such as deer and turkey, prey upon



WHAT IS IT?

Paddlefish | *Polyodon spathula*

The photo on Page 1 shows paddlefish eggs, and above is a young paddlefish. Missouri's official state aquatic animal, paddlefish live mostly in open waters of big rivers, swimming continuously near the surface. As waters rise in spring, paddlefish move upstream to gravel bars to spawn. Eggs are deposited on silt-free gravel bars where, during regular water levels, they would be exposed to air or are covered by very shallow water. The eggs hatch and the larval fish are swept downstream to deeper pools where they grow to adulthood. Paddlefish can attain a length of 10 to 14 inches their first year, and at age 17 they can be 60 inches long. Paddlefish can live to be 30 years old or more. Paddlefish swim slowly through water with their mouths wide open, collecting tiny crustaceans and insects in their elaborate, closely set gill rakers. Because it is one of the most ancestral fish species alive today, it is of considerable interest to biological research. —photograph by Jim Rathert

DID YOU KNOW?

Missourians care about conserving fish, forests, and wildlife.

native wildlife such as turkey and quail, destroy natural areas along with agricultural lands, pollute ponds and streams, and spread diseases to domestic livestock and people.

Feral hogs are known to carry 30 different diseases, including swine brucellosis, pseudorabies, trichinosis, and leptospirosis.

For more information on feral hogs, visit mdc.mo.gov/feralhog.

Length Limit for Spotted Bass Changes to 12 Inches March 1

Anglers at Truman Lake will have increased chances to keep spotted bass as part of their creel limit. Beginning March 1, a new regulation will reduce the length limit on spotted bass caught at Truman Lake from 15 inches to 12 inches.

Bass population studies by Missouri Department of Conservation biologists have shown that spotted bass grow slower than largemouth bass, and many adult spotted bass never reach 15 inches, said Mike Bayless, fisheries management biologist.

During the past five years, studies found only 5 percent of spotted bass measured at Truman Lake are 15 inches or longer. However, 50 percent of them were 12 inches long or more. Anglers at Truman Lake will now be able to keep spotted bass 12 inches or longer. The minimum length limit for anglers to keep largemouth bass remains 15 inches.

"A largemouth bass may reach 15 inches in three or four years," Bayless said, "while a spotted bass may never reach 15 inches in the lake."

Anglers will need to clearly identify the bass species. The two fish look similar. However, the mouth extends beyond the back of the eye on largemouth bass. On spotted bass, the mouth extends to the middle of the eye. Spotted bass also have a rough patch on their tongues, which largemouth lack.

Sometimes called Kentucky bass, spotted bass are native to the upper Osage River system, where they were found in the slower, warm-water streams. The Osage River was impounded to form Truman Lake. One-third of the bass sampled in studies by biologists at Truman Lake are spotted bass, Bayless said.

The change will provide the same length limit for both Truman Lake and the Lake of the Ozarks.

Celebrating Women in MDC History

Through the years, countless women volunteers and staff have helped achieve Missouri's conservation milestones, making our state one of the best places in the nation to hunt, fish, and enjoy nature. From speaking up for establishing a Department of Conservation in the Missouri Constitution in 1936 to leading efforts to place a Conservation Sales Tax on the Missouri ballot in 1976, women have been key to the Department's success.

That record of achievement continues. Today, the Department employs 530 women throughout the state.

- Fourteen women work as conservation agents, serving local communities and helping people comply with fishing and hunting regulations.
- Another 14 women serve as resource scientists assigned to study and advise on the management of Missouri's fisheries, forests, and wildlife populations.
- Seven women serve as private land conservationists, helping landowners around the state manage their land for wildlife.
- Both Conservation Department veterinarians (wildlife and fisheries) are women.
- Hundreds of women, including trained volunteers and hourly and salaried staff, work at shooting ranges and education centers, hatcheries, and nature and interpretive centers to help people gain outdoors skills, learn about nature, and conserve it, too.
- The Department also hires and promotes women to key leadership positions, such as division chief, legal counsel, and deputy director.
- Missouri's governors have appointed several women as conservation commissioners.
- The Conservation Federation of Missouri and the Department's Master Conservationist and Conservation Hall of Fame programs regularly recognize women for their conservation leadership.

The Missouri Department of Conservation is grateful for women's contributions and is proud to celebrate women's role in conserving our state's fish, forests, and wildlife during Women's History Month in March.

Largemouth and spotted bass live in similar habitats. Both feed on smaller fish, crayfish, and insects. Spotted bass, however, tend to be found near the steeper, rocky bluffs, Bayless said.

The daily limit for largemouth and spotted bass at Truman Lake is six fish combined.

Fish sampling showed 2015 was a good spawning year for both species. Bass fishing at Truman Lake should be on the upswing. For 2016 prospects on all sport fish species

at Truman Lake, visit fishing.mdc.mo.gov/reports/truman-lake.

The Department has also made habitat improvements, such as sinking brush piles, at the lake. The Department's free app, Find MO Fish, provides GPS locations for brush piles, and it can help anglers check fishing regulations for waters throughout the state. Visit mdc.mo.gov/mobile/mobile-apps/find-mo-fish.





Longbeard **LESSONS**

**Spring turkey hunting school
is now in session**

BY JAKE HINDMAN

**“Dad, that old gobbler hasn’t
budded for an hour and a half!
What do we do next?”
My dad responded with a
convincing, “Come back tomorrow.”**

Welcome to the unpredictable world of spring turkey hunting. From mentors like my dad, and through trial and error, I’ve learned what tends to work and what doesn’t. Though not every gobbler will follow a rulebook, there are some constants. These are the top five lessons I stick to when going head-to-head with turkeys every spring.

Lesson 1: Brush up on Biology

As with any game, research the animal you intend to hunt. Knowing the animal's basic biology will allow you to connect more often as a hunter. I like viewing wildlife biology through the lens of food, water, cover, and reproduction. These four biological needs make animals tick.

Food: Turkeys eat many different types of food throughout the year. During the spring, turkeys, particularly hens, eat insects and many types of grasses and plants. Areas that have been treated with late winter/early spring prescribed burns and disking can produce excellent food. Hens concentrate on these areas to build up protein for egg production, and as a result, toms are close by. These are great areas to start your scouting efforts.

Water: Wild turkeys, like other birds, are able to draw water from many of the foods they consume. However, direct water sources are important for turkey survival

as well. Creeks, ponds, and small watering holes are great places to find birds. Turkeys seem to prefer roosting around water, so creek bottoms often provide excellent habitat.

Cover: Since turkeys roost overnight in trees, adequate roosting sites are extremely important. During your pre-hunt scouting, look for droppings and feathers, which can indicate roosting sites. In addition, listen for gobbling because toms tend to gobble from the roost in the spring.

Reproduction: Spring marks the reproductive season. As daylight increases, gobblers' testosterone levels rise and they begin gobbling. Most turkey breeding in Missouri occurs in April and May. Hens generally lay between 10 and 12 eggs before starting a 28-day incubation period. Understanding in detail the full reproductive cycle can play a significant role in hunting success.

Interested in learning more?

Jake will present a program titled **Spring Wild Turkey Hunting and Calling** Wednesday, March 23 from 6–8:30 p.m. at the Powder Valley Nature Center in Kirkwood. Call 314-301-1500 for reservations starting March 1.



Lesson 2: Learn the Language

Wild turkeys have an extensive vocabulary and use it frequently to communicate. As hunters, it pays to understand their language and reproduce calls consistently and realistically.

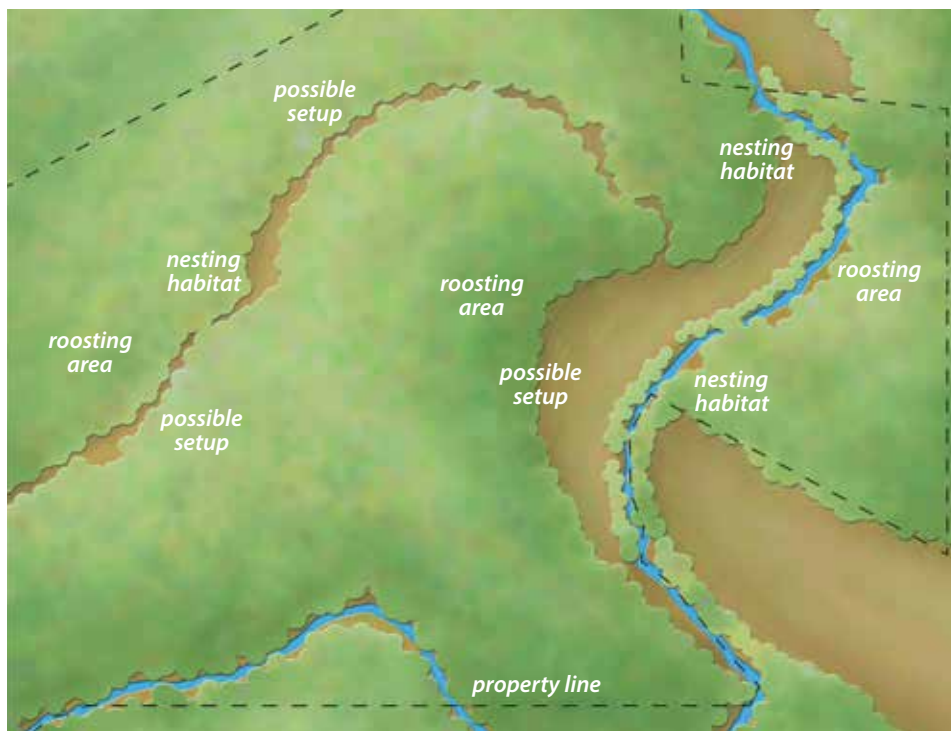
Vocalizations: Turkeys have over 20 different documented vocalizations. Although, in some ways it's important to understand all vocalizations, hunters should become familiar with the yelp and cluck. For sounds of wild turkey vocalizations, visit on.mo.gov/IUFUCx1.

Devices: To produce turkey sounds, there are a number of calling devices hunters can use. The two main types are friction and air blown. For beginners, a friction call (box or push button) is a great choice. Practice producing the yelp and cluck with consistency on both devices.

Lesson 3: Scout for Success

Someone once said you should scout more than you hunt. This is true with turkey hunting. You will not harvest birds if the property you are hunting doesn't have turkeys on it, so spend time scouting before the season starts.

Study the Property: Before the season begins, look at an aerial photo of the property you will be hunting and learn the location of property lines and habitat features, such as fields, timber, and water sources. In addition, study a topographical map for terrain clues. While doing your pre-season homework, locate any creeks, fences, or other obstacles that may hinder a



Becoming familiar with wild turkey vocalizations and practicing them before the season will result in successful communication with a gobbler during the season.

Studying and scouting hunting property in advance of the season opener allows a hunter to note property layout, terrain features, turkey sign, and possible setup locations. This pre-season homework can pay big dividends.



Rules of the Roost

A roost, or the area where birds rest overnight, usually consists of mature trees. Depending on weather conditions, birds will fly up to roost in the evening, usually around sunset, and will fly down to the ground around sunrise.

For a turkey hunter, the roost is an important area; however, these are high-impact areas that should be engaged strategically. Here are some guidelines for spring turkey hunting around roosts.

- Gobblers routinely use the same area to roost, but not always in the same tree.
- To roost a bird, go out the evening before your morning hunt and try to determine where a particular gobbler has decided to spend the night. Use locator calls to entice the tom to gobble. Be aware gobblers will sometimes “hop” trees overnight and may be in a different tree the next morning.
- When setting up on a roosted gobbler, get as close as possible without spooking the bird, usually within 125 yards, depending on the terrain, foliage, and cloud cover.
- Only call to a roosted turkey enough for him to know your location. Don’t attempt to engage in more communication until the bird has flown down to the ground.
- Gobblers often roost with hens, especially early in the season. This is where scouting can pay off big. Early trips can reveal where birds roost and usually the area where they fly down, allowing you to setup in a spot where the birds want to be.

Solid setups, such as the one above, allow for safety of the hunter as well as concealment. Effective setups are also located where a gobbler will feel comfortable coming into range of your equipment.

gobbler and make a mental note of where these are located. Use binoculars to scan fields for birds and signs such as droppings, scratchings, dusting areas, feathers, and roosting areas. If hunting private property, make sure you have permission well in advance.

Listen for Gobbling: As spring progresses and flocks begin to break up, toms will routinely gobble at dawn. Start listening for gobblers around the middle of March. If possible, listen once a week on the property you intend to hunt, preferably on clear, windless mornings. Pick an unobtrusive area on the property for listening and arrive at least 30 minutes before sunrise. Keep a log of the number of birds you hear and their location. Use a locator call — owl, crow, or hawk — to solicit gobbles if needed. However, avoid using turkey calls before the season opens (this can potentially lead to unresponsive birds during the season).

Take Notes: Mark not only where turkeys are roosting, but also where they land after flying down from their roost. If possible, try to observe where the birds frequent throughout the morning. By doing so, you will have a plan in place for mid-morning hunts if your

first setup of the day doesn't pan out. Mapping out the habits of as many birds as possible will give you options, thus increasing your chance for success.

Lesson 4: Nail the Setup

The process of setting up on a gobbler and ultimately "working the bird" is an art and science. Often, bagging a tom depends on setup more than anything else. Setting up to call a gobbler to within range of a shotgun or bow can be broken down into three steps.

Close the Distance: Get as close as possible to the gobbler or a known turkey hangout, preferably 125 yards or closer, depending on terrain and cover. As you search for a setup, use locator calls to keep tabs on the bird's location.

Pick a Spot: Find a location before making any turkey calls in case the gobbler comes in quickly. Turkeys hesitate to cross obstacles, so make sure you avoid setting up with any barriers between you and the gobbler, such as creeks and old fences. Make your setup safe by choosing a tree that is wider than your shoulders and a spot where you are visible to other hunters should they happen to approach your setup. Based on where the tom is gobbling, visualize where the tom may approach and mentally work through taking the shot.

Settle In: Get a good seat to ensure you remain comfortable. Pack food and

drink. Keep your gun up and pointed in the direction you expect the gobbler to approach. Positively identify a legal turkey that is within range of your equipment and ensure the shot is safe. In addition, be prepared for other toms to sneak up on your call.

Lesson 5: Control the Conversation

Successfully communicating with a gobbler and convincing him to come within range of your setup can be both the simplest and most challenging part of spring turkey hunting. After all, the bird/human conversation is what brings many of us to the timber every spring.

In an ideal scenario, you get to within hearing distance of a tom, pretend to be a sweet sounding hen, and the gobbler trips over his beard to get to your location. It ends with a turkey on the table. The challenge comes when the gobbler doesn't respond to your call for any number of reasons — too many obstacles, stubbornness, can't see the hen, or already has a hen. However, I've found the technique of controlling the conversation to be more successful than others I have tried. Here's how it works.

Climb the Ladder: Your call is a form of communication that means something to the turkey — you are speaking his language. Like any other dialogue, you should start with passive calls before climbing to more aggressive ones. Your job is to communicate one message to the gobbler — come to my location.

Be Realistic: When making calls, be as realistic as possible and throw in other normal sounds as well, such as leaf scratching. Consider using multiple calls to convince the gobbler there is more than one hen.

Resist the Urge: The key is to avoid immediately responding to a tom right when he gobbles. If you do, you are essentially telling the gobbler you are coming to him because you answered his gobble. Instead, wait until he gobbles and then communicate with yelps and cutting, letting him know you want him to come to you. If he gobbles again, don't tell him you are more interested in him than he is in you. If you do, he will put the brakes on and expect you to come to him, which is the way it normally works in nature.

Hunting gobblers in the spring can be unpredictable. However, more often than not, toms will follow the rules. Spend time understanding turkey biology, practice calling, scout, strategically setup, and control the conversation. If a bird doesn't work to your setup on a particular day, you can apply what you learned and "come back tomorrow." ▲

Jake Hindman, outreach and education district supervisor in the St. Louis Region, enjoys spring wild turkey hunting.



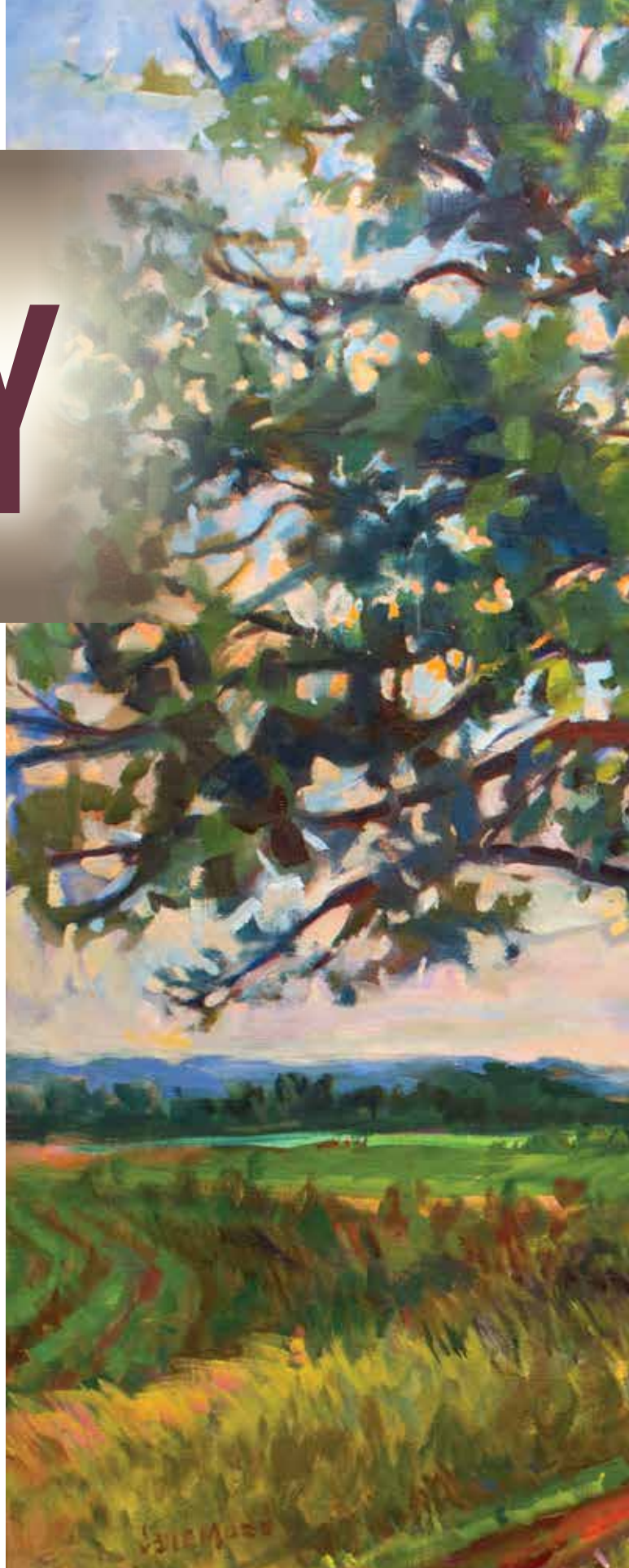
NOPPADOL PAOTHONG

the MIGHTY ones

Celebrating Missouri's Champion Trees

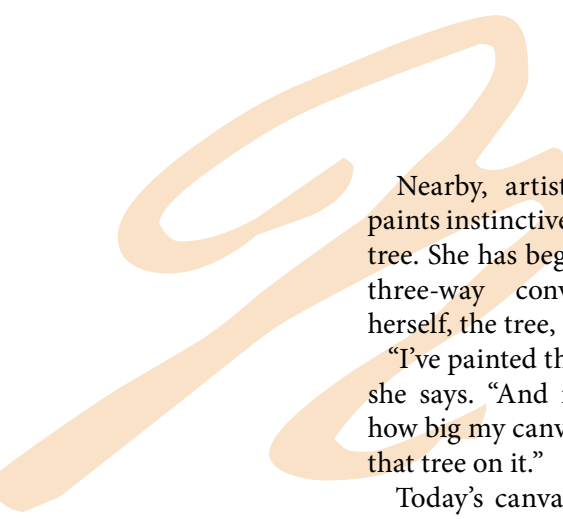
BY BRETT DUFUR
PAINTINGS BY JANE BICK MUDD

DOWN IN THE MISSOURI River bottoms near McBaine, bean fields dominate the view. Then, suddenly, around a bend, a lone tree looms large. A gigantic bur oak towers above the landscape like an arboreal exclamation point.





McBaine's Bur Oak



Nearby, artist Jane Bick Mudd paints instinctively, eyes fixed on the tree. She has begun what she calls a three-way conversation between herself, the tree, and the canvas.

“I’ve painted this tree many times,” she says. “And it seems no matter how big my canvas is, I can never fit that tree on it.”

Today’s canvas — big enough to celebrate a larger-than-life tree that enjoys regional rock-star status — barely fits in the back of her car.

Jane is an assistant professor of art at William Woods University. She enjoys painting in the outdoors, or *en plein air*, as it is called (see related story on Page 24). The McBaine bur oak has long been a popular subject with the state’s *plein air* artists.

“I try to capture the personality of the tree,” Jane says. “I spend time getting to know the tree’s uniqueness. I believe things are revealed in this observation that a photograph just can’t capture. The outcome is unpredictable and surprising, but if I’m really listening — successful.”

Jane’s paintings featured here are all champion trees — the biggest known examples of each species — from around the state.

“I’m fascinated that Missouri has so many champion trees and that the Conservation Department is taking care to promote them and keep track of them. The trees I visited certainly had an enduring and commanding presence about them. These trees evoke integrity, endurance, and are selfless, always giving and forgiving.”

McBaine’s Bur Oak

The state champion bur oak, located near Eagle Bluffs Conservation Area, has survived the Civil War, lightning strikes, fire, the flood of 1993, and more. Estimates place the tree’s age at 300 to 400 years old.

Writer Eva Dou, of the *Los Angeles Times*, put it best in 2010. “People have partied, prayed, proposed, politicked, and had their ashes spread under the revered bur oak.”

For six generations, John Sam Williamson’s family has cared for the bur oak. “We own the land where the tree is, but it’s everybody’s tree,” says John Sam.

This tree has been the state’s champion bur oak since 1987. It measures 295 inches around, is 74 feet tall, has a spread of 129 feet, and scored 401 points using the state’s measuring system (see sidebar on Page 23 for more information).

“It’s genetically superior or it wouldn’t have lived that long, but it’s also really lucky. I think it will outlive all of us,” John Sam says. Learn more about the Williamson family’s efforts to keep the tree healthy by viewing *Keeper of the Tree*, a short video, at bit.ly/1OPaQIA.

Dean Ogden’s Champion Slippery Elm

While some champion trees are discovered far from it all, the state champion slippery elm was “found” squarely in a Neosho man’s front yard. Dean Ogden knew the slippery elm was big, but he had no idea it was one for the record book.

“I didn’t know it was a state record,” Dean says of the tree that towers over his home, “but every time I went out there and weeded around it I thought, ‘Man, that’s a big tree!’”

A call to the Conservation Department led to a visit and some measuring by Community Forester Jon Skinner. Its measurements revealed a slippery elm tree that had no equal in the state. Dean’s elm measured 82 feet high and had a circumference of 14 feet, 7 inches. Its spread measured 65 feet, and it scored a total of 273 points.

“I bought this place 11 years ago because I wanted that big tree in my front yard,” Dean says. “I grew up in Carthage and saw how elm disease wiped out a lot of the town’s trees. I thought, how did this one survive? Because there were no other elm trees around it.”

Dean encourages people to visit the tree in his yard. “I’ve had school groups come out to see it. It’s a special tree. The trunk is almost 7 feet long-ways — it’s like four or five trees in one. It’s just hard to believe.”

Slippery elms, also known as red elm, are found across Missouri. They are water-loving trees that reach their largest size on moist, rich soils on lower slopes and in bottomlands. The tree in Dean’s yard likely grew so large due to being located in a stream valley with good soil, abundant moisture, and protection from strong winds.

“I’m a conservationist,” Dean says, “and I’m looking out for it.”

Watch a video of another *plein air* painter, Brian Mahieu, as he develops his impression of Missouri’s state champion bur oak at bit.ly/1Qgmnfl.



Dean Ogden's Champion Slippery Elm

March 2016 Missouri Conservationist 19

Missouri Botanical Garden's White Basswood



Missouri Botanical Garden's White Basswood

In the heart of St. Louis, the state's champion white basswood adds to the regal air of the architecturally stunning Museum Building, one of the original structures built at the Missouri Botanical Garden more than 150 years ago.

"It's pretty amazing, really. We've got the state champion white basswood on one side of the sidewalk, and the former state champion

possum haw directly across from it," says Ben Chu, horticulture supervisor at the Missouri Botanical Garden, one of St. Louis' go-to locations for nature lovers.

The white basswood is also a *national* champion. It measures 87 feet tall, has an 84-foot crown, a 158-inch circumference, and scored 266 points. After craning your neck to admire it and touring the ground's immense gardens and forests, it's hard to believe the area was virtually treeless when Henry Shaw began it in 1859 on the Missouri prairie.

Among his other duties at the garden, Ben ensures champion trees get extra attention. "We made sure the tree was lightning-protected with a copper ground. We also eliminated the turf under the tree. That helps reduce competition between the tree roots and the turf. We do what we can to eliminate compacted soil around it, so that the soil does a better job of absorbing moisture and oxygen."

Two other former champion trees can also be found on the Garden's 79-acre grounds, which are open to the public at 4344 Shaw Blvd., St. Louis, MO 63110. Learn more at mobot.org or call 314-577-5100.

Robinson Cemetery's Northern Catalpa

In the northeast corner of Missouri, in Hannibal's historic Robinson Cemetery, the state champion northern catalpa casts a broad shadow over many generations of African-Americans who now lie in rest there, including Elizabeth "Muddy" McElroy, age 100 years and 5 months.

The tree is everything a champion should be. It is a behemoth and the perfect metaphor of strength in a place that celebrates lives well lived. The tree entered the pantheon of champions thanks to its massive girth — measuring more than 24 feet around. In addition to that 290-inch circumference, it stands 70 feet tall and has a 70-foot spread, earning it 378 points.

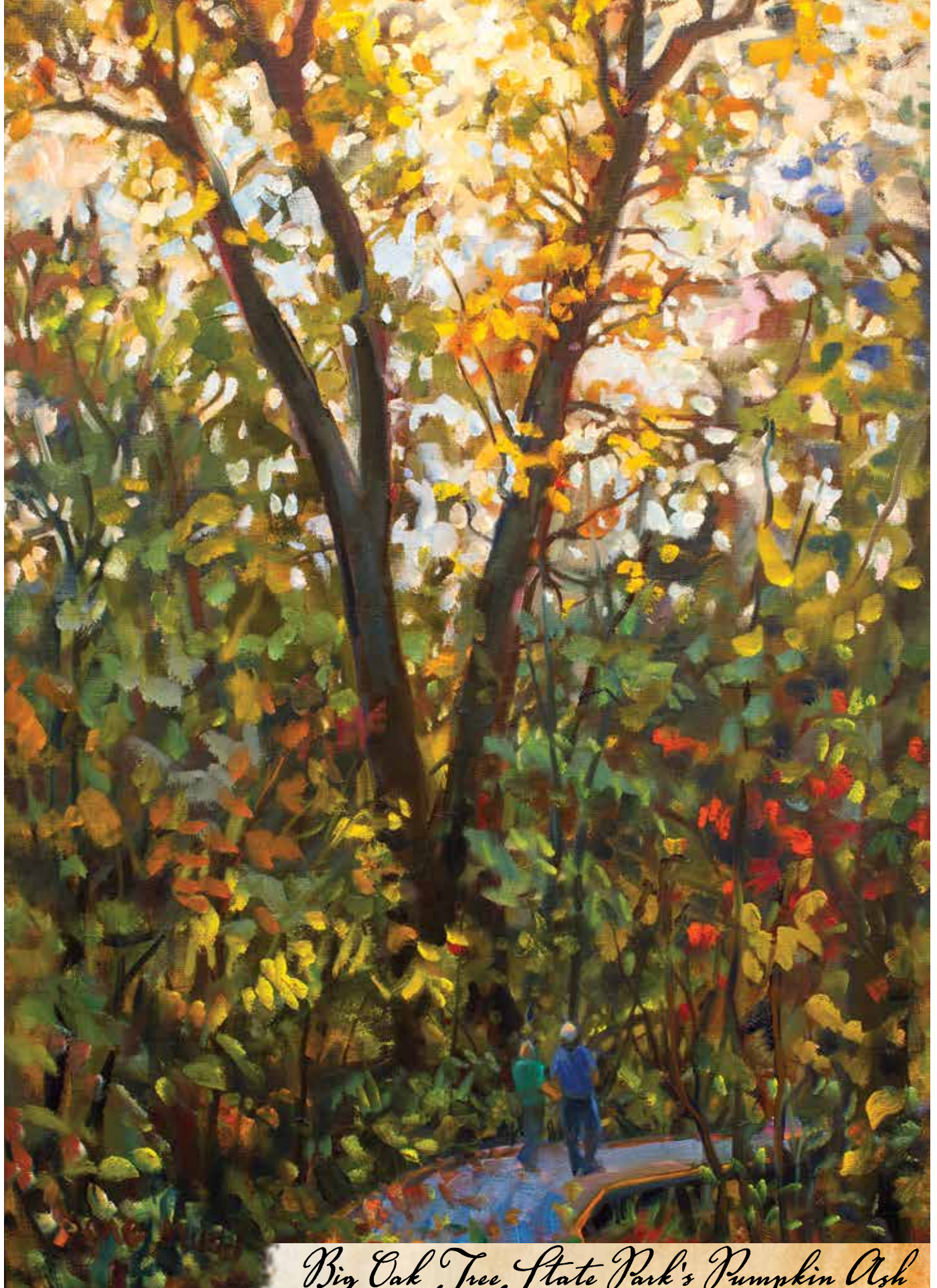


Robinson Cemetery's Northern Catalpa

"Muddy" McElroy and many of her descendants share the shade from that tree, which was planted by a family member. According to the *Hannibal Courier-Post*, credit for planting the tree goes to Lita McElroy Washington, who planted it approximately 120 years ago.

Lita planted the sapling catalpa back then in the center of the family's cemetery plot because her mother and

father were buried there. She didn't like the thought of them lying out there in the hot sun. Today, even Lita, who planted the tree, along with her husband, lies in rest under the mighty catalpa, although the exact site of their burial has been lost to time.



Big Oak Tree State Park's Pumpkin Ash

Big Oak Tree State Park's Pumpkin Ash

To paint the state champion pumpkin ash, Jane traveled to the southeastern edge of Missouri. "I drove down to Big Oak Tree State Park not knowing what to expect," she says.

"Imagine my surprise to find an old-growth forest in the midst of flat farmland. Except for a passing couple, I think I was the only one in the park," she says. "It was a little drizzly, but I was able to get most of the painting done before the heavier rains came down."

The champion pumpkin ash is easily viewed from the boardwalk. It stands 104 feet tall, has a 196-inch circumference, a 78-foot spread, and totaled 320 points. While state foresters were visiting the park to re-measure the champion ash, they stumbled upon an undiscovered champion.

"Lo and behold, we found a new champion. It had been right under my nose the whole time," says Jen Weaver, the park's natural resource steward. "We now have the champion sweet gum, too. It was right up front in the picnic area. It scored a 305. We beat out the old champion in Sikeston, not by much, but we're claiming it."

That gives Big Oak Tree State Park bragging rights for four state champion trees: sweet gum, pumpkin ash, persimmon, and swamp chestnut oak. It has always been known as the park of champions. Many past state and national champion trees dot the 1,029-acre park, which preserves a rare, untouched bottomland hardwood forest that once covered vast areas of the Bootheel region.

"We have so many big trees here, it's easy to lose perspective. So many of our trees are absolutely massive," Jen says. "I actually saw a Conservation Department forester skip when he saw our massive swamp chestnut oak."

Jen has gotten the champion tree bug and is on the hunt for more. "I'm on a mission. I plan to continue searching this winter," she says. "There's a good chance we'll find another champion out there. We're looking at wetland swamp species. I'm keeping my eye out for a sizable black willow and water elm, which only occur in the lowland southeastern region."

Visit these champions at Big Oak Tree State Park, 13640 South Hwy 102, East Prairie, MO 63845. Before you travel, visit on.mo.gov/LLSIU5 or call 573-649-3149 for more information.

Learn More and Nominate New Champs

Learn how the big trees are measured, what species are eligible to become state champs, and how to nominate trees you find. Visit mdc.mo.gov/ChampionTrees.

Vote for Missouri's Big Sassy Bassy

Each year, a Big Tree Madness competition pairs up champion trees from across the United States.

"It's a fun way to take March Madness to a whole new level," says Donna Baldwin, the Department's state champion tree coordinator. "Missouri has won this contest twice, thanks to great support for our terrific trees."

"We are hoping Missourians rally behind our champion tree for a solid win this year," Donna says. "In 2014, our white basswood, nicknamed 'Big Sassy Bassy,' was defeated by Hawaii, but if more Missourians vote for Big Sassy this year, we can claim the title."

Crowning 2016's ultimate champion is up to you. The competition is coordinated through American Forests' Facebook page at [Facebook.com/AmericanForests](https://www.facebook.com/AmericanForests). Get the full scoop on Big Tree Madness guidelines at americanforests.org/bigtreemadness.

The Search for Missouri's Champion Trees Continues

The five trees highlighted here offer just a sampling of the 120 trees certified as the biggest examples of their species in the Show-Me State. To view the full list, visit on.mo.gov/InL04nU. Although some are on private land (and may not be available for public viewing), many are on public land, including conservation areas.

Remember that champions do indeed fall, and a new champion invariably rises to take its place. Some champion trees remain to be discovered on farms and in front yards across the state. So keep your eyes to the sky — you might just find Missouri's next champion tree. ▲

Jane Mudd is an assistant professor of art at William Woods University. She lives on a farm east of Fulton in a restored log cabin with her husband, Tom.

Brett Dufur is a former Department writer and editor. He has vivid memories of climbing his neighbor's gigantic bald cypress tree as a kid.

CONSERVATION *en Plein Air*

**Painters
capture
impressions
of Missouri's
natural beauty
at nearby
conservation areas**

BY BONNIE CHASTEEN
PHOTOS BY DAVID STONNER

LINDA HOFFMAN FROWNS AT HER canvas. "I need an olive green for the water."

Kathryn Mitter looks up from her easel. "Add red."

"Which red?"

Mike Seat glances Linda's way. "Burnt umber?"

Kathryn counters: "Burnt sienna?"

Like hunters or anglers debating about gear, the three artists consider a range of brownish reds before Linda settles on her charge: burnt sienna. All the while, they dab furiously at their canvases, as if tamping out little fires. In fact, they are chasing the light, which changes every few seconds on this blustery June morning at Rocky Fork Lakes Conservation Area (CA) north of Columbia.





Rocky Fork Lake by Kathryn Mitter

En plein air or “in the open air” describes their manner of painting, which became popular in 19th century France, then spread to Russia and America. *Plein air* painters work in natural light rather than in the studio, aiming to capture fresh, authentic impressions of objects as they appear to the eye. Even if you don’t know your art history, you’ve seen *plein air* works. Think of Claude Monet’s *Water Lilies*.

Given the rise in *plein air* festivals across the country and around the state, you could say this historic manner of painting is experiencing a renaissance. Not surprisingly, many Missouri artists are discovering that conservation areas are great places to paint outdoors.

Working Against the Wind

This morning, Linda, Kathryn, and Mike pursue their impressions from the area’s covered fishing dock while several other members of the Columbia Palette Group set up along the shore.

Some have elaborate easels, heavy bags, and complicated tools. Others carry smaller kits: a board with watercolor paper attached, a roll of brushes, a couple of small paint trays. All choose their spots, and all anchor or guard their materials against the wind as they set up. In spite of Jerry Thompson’s caution, a gust blows his watercolor board onto the grass soon after he applies a wash.

“That’s OK,” Jerry says. A retired architect, he’s been painting outdoors for many years and accepts the fact that he’s going to get grit, leaves, and bugs in his work. “Now it just has more nature in it.”

I appreciate his good humor, but I have to ask, “Why go to the trouble to paint outdoors? Why not just work from photos in the studio? Painting is hard to begin with. Why fight the elements, too?”

Member Colette Brumbaugh, who is setting up her easel and palette of oils, has a ready answer. “We try to

capture the essence of the landscape, not represent it exactly.” She looks out over the lake, which shifts blue, black, and green under the ever-changing sky. There’s so much to take in, and I can see that, like a good hunter, she and every other artist in the group has aimed their sights on a particular target: the fishing dock, the shoreline, a cove, or an arm of land reaching into the lake.

And, like all good outdoorspeople, they’ve come prepared. Colette says her car looks like she lives in it. “I have gear for just about any weather — ski bits, slickers, boots, bungee cords — anything I might need to help me survive in the field.”

Painting together is part of that survival strategy. The members share materials, tips, equipment, and encouragement.

Mike emphasizes the social and artistic-development aspects of gathering to paint outdoors. “I get a lot of creative energy from these people!” A former air-traffic controller, Mike has worked steadily to develop his painting skills, both in studio and afield, since he retired six years ago. “I took a couple of *plein air* classes at Columbia Art League and with Brian Mahieu at the Art House in Fulton,” he says. (Watch a video of Brian painting the state champion bur oak at McBaine on bit.ly/IPB1oiM.)

Find a *Plein Air* Painting Group Near You

Want to join others who paint *en plein air*? A quick Internet or Facebook search turns up a surprising number of open-air painting groups around the state. Some require membership dues, and others are free and open to all. Here are just a few, but be sure to browse the Web for others in your community.

- The Arts Council of Southeast Missouri’s Visual Arts Cooperative includes several members who gather to paint *en plein air*. Visit their website at capearts.org.
- The Columbia Palette Group members enjoy the mutual support and camaraderie of painting outside together. Prospective new members should visit columbiapalettepainting.weebly.com to browse member profiles and contact information.
- The Missouri Plein Air Painters Association is a St. Louis-area group that gathers to paint in oil, watercolor, or pastel on landscape and architectural sites. Visit their website at missouri-pleinair.com, or find them on [Facebook.com](https://www.facebook.com).
- Kansas City-area group, The Missouri Valley Impressionist Society, welcomes all “who paint, love, and support representational impressionism throughout our region.” Find them at missourivalleyimpressionistsociety.com.
- Springfield Plein Air is a free painting group based on participation and donations. The group welcomes first-timers. Find their group page on [Facebook.com](https://www.facebook.com).



Colette Brumbaugh and Jerry Thompson aim for different views of Rocky Fork Lake.



*Kayaker at Rocky Fork Lake
by
Jerry Thompson*



The Dock and I by Colette Brumbaugh

Colette continues, explaining how she discovered Rocky Fork Lakes CA. "I knew about this place because my husband is a tournament fisherman. We'd come up here, and while he fished, I'd paint."

As a *plein air* painting location, Rocky Fork Lakes CA offers easy access off Highway 63 north of Columbia. It features beautiful views of ponds, lakes, and rugged oak-hickory forest and savanna. The covered fishing dock on the main lake offers shelter from sun, rain, and — to a certain extent — the wind.

Jerry says the group enjoys painting here. A couple of anglers stop to admire the painters' work. Another man carries a kayak and a couple fishing poles down to the shore and readies his gear to launch. I watch Jerry work the man's figure and craft into his composition. I wonder if he'll be able to pull it off in this wind, in spite of his good humor.

As the blustery morning brightens to midday, and the wind dies down a little, I drift between the scattered groups of painters, following their progress. Linda's combination of green and burnt sienna produced just the

right shade of deep, warm green for the lake's water. And Jerry's wind-battered watercolor? It survived, catching the kayaker's image along with the day's dramatic light and color.

Bagging the Best Views — In Spite of the Bugs

When I arrive at Cape Girardeau Conservation Nature Center in late October, the weather is unusually hot and dry, but the fall leaves still blaze gold, orange, and red against the clear blue sky.

I find Ellen Hahs down by the old frog pond, methodically pursuing an upswept view of the nature center nestled against the glowing autumn trees. She wears a broad-brimmed hat and long sleeves, both necessary protection against sun and Asian lady beetles, which swarm in the open areas. An array of paintbrushes bristles from between her fingers as she works her composition. "This helps me avoid stopping to clean my brush all the time," she says.

Ellen is curator of education at Southeast Missouri State University's Crisp Museum. She's been painting for 20 years, and in 2014 she did a workshop here at the nature center with renowned Missouri *plein air* painter, Billyo O'Donnell. She likes the challenges of painting outside. "It's a constant process of solving problems," she says. Although she's painting with an informal group of Arts Council of Southeast Missouri Visual Arts Cooperative members this afternoon, she often paints alone, and enjoys scouting painting locations at conservation areas.

Earlier today she visited General Watkins CA southeast of Benton and found "some really good stuff" there. "There's a great drop-off ledge — a kind of little valley — and ponds." Other conservation areas she likes to paint are Sand Prairie CA, just east of Benton, and Duck Creek CA north of Puxico. "They're all completely different," she says. "They have different kinds of trees and plants. Even in the fall and winter, people think everything's dead, but you can really play a lot with color, push the shadows into blues and purples."

Demonstrating as she talks, she explains her method of blocking out large areas of color from background to foreground and of the need to balance the hue, intensity, and value of her colors. Her painting takes on depth and definition as she works, and I leave her to work in peace while I catch up with the other painters.

Brenda Seyer, Vicki Outman, and Helen Towner are all members of the Visual Arts Cooperative, where they often show their work. Brenda teaches art privately, and today she and a couple of young students are working just outside the nature center entryway. She's hoping to include some of the area's hummingbirds in her oil composition. Meanwhile, she's assigned her students to draw in the shade. "They work outside," she says, "then we take the drawings inside to discuss color and composition."

Around the corner from Brenda and her students, Vicki is braving the Asian lady beetles to render an autumn scene in pastel. A field umbrella offers a bit of protection from the sun and bugs. A visual arts co-op member for 13 years, Vicki is also an ardent fan of painting *en plein*

Cypress Trees
by Ellen Hahs





Full Path by Vicki Outman



in autumn color. Her painting mate, Marty Riley, is a retired nurse. Marty's medium is pastel, and she has captured a tight view of a pair of gold-fringed bald cypresses standing in the lake's blue water. Aside from painting at the nature center, both enjoy chasing scenes at Amidon

and Duck Creek conservation areas, as well as Montauk State Park and Fish Hatchery.

Outdoor adventure is often about the thrill of landing the big fish or bagging the big buck. It becomes conservation when we awaken to the fact that these trophies depend on habitat, both its quantity and quality. Painting outdoors is part of this tradition. The physical, mental, and creative challenges of painting in nearly any weather can be as great and just as rewarding as those of angling, hunting,

and trapping. And while painting doesn't necessarily increase or conserve habitat, it recognizes and celebrates it, helping others discover and appreciate it, too.

Scattered from one end of the state to the other, conservation areas provide key habitat for wildlife and treasured places for us to connect with nature. Missouri's *plein air* painting groups help us see and appreciate these vibrant areas in fresh new ways. ▲

Bonnie Chasteen is associate editor for the Missouri Conservationist and a big fan of Missouri conservation areas. She doesn't get out to paint en plein air nearly as much as she'd like to.

air — in spite of the hardships. Painting in natural light “enhances your work,” she says. “The colors are more accurate. True, you also get to enjoy fighting the bugs and wind and having your things blow away. But you learn so much more, especially about light and shadow and color values. Colors aren't true working from a photograph.”

Trooper she is, but Vicki cedes her sunny spot to the bugs, and we move toward shade. There we find Helen setting up her watercolor kit in the cool shadow of several old, gnarled Osage orange trees. One trunk lies along the ground, and the sinuous branches and roots offer a tempting composition.

Helen shows me her trick for making her watercolor kit field-friendly. Instead of carrying the weight of paint tubes, she squeezes her colors into a segmented palette and lets it dry. This keeps wet paint from spilling or running until she's ready to mix it with water. Like her fellow painters, she lists the benefits and challenges of painting outdoors. “You have a brief window of maybe two hours before the light and the shadows change.” She regards the trees' heavy, grooved branches and considers her scope. “I'm just going to do the branches and the speckled light, that could be enough.”

I catch up with co-op members Anita Dickerson and Marty Riley over by the lake just as they are packing up for the day. Anita, a retired elementary school art teacher, shows off her fresh oil painting of the lake reflecting trees

Browse More Than 1,000 Conservation Areas Online

The Missouri Department of Conservation owns or manages more than 1,000 conservation areas, natural areas, accesses, and community lakes around the state. Visit mdc.mo.gov/atlas and use the search menus to find scenic places to paint near you. Many of our areas offer beautiful views and unique opportunities to see Missouri's native plants and wildlife. Use the Detailed Search option to filter for activities such as birding, hiking, and nature viewing. Remember to check your chosen area's map and regulations, and be aware of hunting seasons before going afield to paint.

Skunk

ROBERT CAPA, A famous war photographer, once said, “If your photos aren’t good enough, then you’re not close enough.” As a wildlife photographer, I agree. When I’m asked what lens to use when photographing a wild animal, I often say, “Get closer to your subject.” There are exceptions, however, especially when photographing nesting birds, bears, and skunks. At these times, a long telephoto lens is a must. It’s risky to photograph a skunk at close range, for obvious reasons.

There are two types of skunks in Missouri — the striped skunk (*Mephitis mephitis*) and the eastern spotted skunk (*Spilogale putorius*). The striped skunk, a member of the weasel family, is a fairly large mammal, about the size of a house cat. It’s easily identified by two white stripes that run along its back.

Skunks are primarily nocturnal, sleeping in a den or burrow during the day and hunting at night. They like open woods, grassy fields, and are never far from water. Skunks are omnivorous, with a diet that includes insects, small mammals, fish, fruits, nuts, leaves, and grasses. They have long claws on their front feet to help dig for food.

With the exception of a few birds of prey, like the great horned owl, and an occasional red fox or coyote, skunks have very few natural predators. Since skunks don’t hibernate in winter, they begin mating from mid-February to mid-March. Skunks give birth to blind and deaf babies a few months later, usually in litters of five to six.

The striped skunk has two highly developed scent glands on each side of the anus that sprays a foul-smelling oil up to 12 feet. Contrary to popular belief, it’s their last line of defense. Before spraying, a skunk will first face its attacker, arch its tail, chatter its teeth, and stomp its feet. If the threat doesn’t go away, then it will turn around and spray.

While driving on a county road in northwestern Missouri one cold evening, I spotted a striped skunk. Unfortunately, tall vegetation was obscuring it from view. The only way to get a good image was to get close.

A fellow photographer who was with me at the time thought I was crazy to even attempt to photograph a skunk this way. I crawled slowly until I was a few feet away. I could see it was feeding on a small rodent. To my surprise and relief, it didn’t feel threatened by my presence and didn’t retreat into a defensive position. It was too busy eating. After finishing its meal, it gave me one last glance and walked away slowly into the cover of grass.

Years of photographing wildlife have taught me how to stalk animals and read their body language. If you must get close to wildlife, move slowly, pay attention to their body language, and watch for warning signs, like a skunk’s raised tail.

—Story and photograph by Noppadol Paothong

📷 70-200mm lens • f/5.6 • 1/800 sec • ISO 200

We help people discover nature through our online Field Guide. Visit on.mo.gov/1M3cWgI to learn more about Missouri’s plants and animals.





Schell-Osage Conservation Area

This 8,633-acre area was one of Missouri's first managed wetlands, and it continues to be a hot spot for waterfowl hunters and birdwatchers today.

NESTLED ON THE south bank of the Osage River in Vernon and St. Clair counties, Schell-Osage Conservation Area is a premier destination for birders. Waterfowl, bald eagles, various shorebirds, and many neotropical migrants use the area's diverse habitat to forage and rest during migration.

Waterfowl hunters have access to 1,400 acres of managed wetlands, providing both wade-and-shoot and blind-hunting opportunities for up to 38 parties. During the Middle Zone portion of duck season, hunting positions are allocated through a daily drawing held at the area headquarters. Waterfowl numbers typically peak in the third week of November, often exceeding 125,000 ducks and geese.

Anglers will find ample opportunities at Schell-Osage throughout the spring and summer. The area's 461-acre Atkinson Lake and 365-acre Schell Lake provide quality catfish fishing and tremendous spring crappie fishing, producing stringers of hefty white crappie. Shoreline access to the Osage River also provides an opportunity for catching spoonbill and catfish on a regular basis. Access to these areas is restricted from October 15 through January 31, since these areas are part of the waterfowl refuge.

Purchased in the late 1950s, Schell-Osage opened to the public in 1962 as one of Missouri's first managed wetland areas designed to provide habitat for migrating waterfowl and opportunity for hunters. Historically, the area was covered in upland and wet prairie, with pecan-oak-hickory forest in wet areas and easternmost sections. Today, small remnant prairies are all that exist of the once-vast native grasslands that covered western



70-200mm lens • f/5.8 • 1/640 sec • ISO 100 | by David Stonner

Missouri. The area's uplands are now a mix of old fields, grassland, woodland, and cropland ideal for many species.

Visitors may find areas of ongoing brush removal, which is part of an aggressive effort to restore nearly 600 acres of grassland and old field habitats using seed harvested from local native prairies. Rabbit, quail, deer, turkey, and grassland birds have already benefited from over 150 acres of newly planted grassland.

As part of the Department's Golden Anniversary Wetland Initiative, the area's wetlands will be receiving a much-needed redesign in the next couple years.

—Josh Cussimano, area manager



Schell-Osage Conservation Area

Recreation Opportunities: Waterfowl, turkey, and archery deer hunting; birding and wildlife viewing; fishing

Unique Features: Woodlands, grasslands, prairie, wetlands, lakes, Osage River

For More Information: Call 417-432-3414 or visit mdc.mo.gov/a5701

MDC DISCOVER nature



IDEAS
FOR
FAMILY
FUN

To find more events near you, call your regional office (phone numbers on Page 3), or visit mdc.mo.gov and choose your region.

TURKEY BOX CALL WORKSHOP

MARCH 12 • SATURDAY • 9 A.M.–12 P.M.

Ozark Region, Twin Pines Conservation Education Center, RT 1 Box 1998, Winona, MO 65588

Registration required, call 573-324-1381

Ages 12 and older

Participants will construct and decorate their own cedar box call. Local call maker Dave Woods will be present to offer tips and tricks on using box calls during spring turkey season.

NATURE CENTER AT NIGHT: A FUNGUS AMONG US

MARCH 17 • THURSDAY • 5–8 P.M.

Southeast Region, Cape Girardeau Conservation Nature Center, 2289 County Park Drive, Cape Girardeau, MO 63701

No registration required, call 573-290-5218 for more information

All ages, families

Missouri is home to hundreds of mushrooms of all shades and shapes. Check out our display to learn about some of the most common mushrooms in the state.



SURVIVAL 101

MARCH 19 • SATURDAY • 10 A.M.–12:30 P.M.

St. Louis Region, Powder Valley Conservation Nature Center, 11715 Cragwold Road, Kirkwood, MO 63122

Registration required, call 314-301-1500

Ages 7–12

Learn survival skills like shelter building and fire starting, and find out what you need for your survival backpack.

SIGNS OF SPRING

MARCH 19 • SATURDAY • 10 A.M.–2:30 P.M.

Kansas City Region, Anita B. Gorman Discovery Center, 4750 Troost Ave, Kansas City, MO 64110

No registration required, call 816-759-7300 for more information

All ages

Going on a hike is a great way to experience the many sights and sounds of spring. Come make your own hiking stick at 10 a.m., 11 a.m., 12:30 p.m. or 1:30 p.m. Then take a hike with us outside or enjoy one of our other springtime activities inside.

DISCOVER NATURE – TURKEY HUNTING BASICS

MARCH 26 • SATURDAY • 8:30 A.M.–2:00 P.M.

Southwest Region, Andy Dalton Shooting Range and Outdoor Education Center, 4895 N. Farm Road 61, Ash Grove, MO 65604

Registration required, call 417-742-4361

All ages

Join us to discover the basics of turkey hunting in the spring. We will cover safety, scouting, calling, proper setup, shotgun ballistics, and much more.

HUNTER EDUCATION SKILLS SESSION

MARCH 29 • TUESDAY • 5:30–9:30 P.M.

Central Region, Department of Conservation Regional Office, 3500 East Gans Road, Columbia, MO 65201

Registration required, visit www.register-ed.com/programs/3 or call 573-815-7900 by March 22

Ages 11 and older; students 16 and under need a birth certificate or proof of age

This skills session will satisfy part two of the Missouri Hunter Education requirements. To obtain hunter education certification, you must complete part one prior to attending this session.

DISCOVER NATURE — WOMEN: SPRING WORKSHOP

MAY 13–15 • FRIDAY–SUNDAY

Northeast Region, Mark Twain Lake

Registration required by April 15, contact Rob Garver 660-351-3129 or rob.garver@mdc.mo.gov

Women 18 and older; girls 14–17 welcome if accompanied by an adult woman

Event will include archery, canoeing, boating, fishing, campfire cooking, and rifle, pistol, and shotgun shooting.



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I Am Conservation

Dana Ripper and Ethan Duke are co-founders of the Missouri River Bird Observatory (MRBO), a nonprofit organization for the conservation of Missouri's birds. "We saw there was a niche for a bird observatory in Missouri that could assist a wide variety of agencies with monitoring and research work, as well as provide statewide education programs," said Ripper, who serves as director of MRBO. The organization grew out of her work on a songbird migration-monitoring station at Grand Pass Conservation Area. "Data from the station identified how important the Missouri River corridor is to migrating songbirds," said Ripper. "Grand Pass is known for its waterfowl numbers and hunting opportunities. Our work highlighted the importance of the conservation area for nongame birds as well." Duke, who serves as assistant director of the observatory, grew up with an appreciation of nature acquired through hunting and fishing in rural western New York State. "There is no better place to join the conservation effort than in Missouri," said Duke. "The natural communities of this state are uniquely diverse, and it would be safe to say that the MRBO would not exist in its current form without the Missouri Department of Conservation. The Department has clear goals and objectives for conservation, and a cohesion and dedication within the agency that we have never seen anywhere else." —*photograph by Noppadol Paothong*